

A Natural Conclusion: When Teens Rank Green Space “Very Important,” They Visit More

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Access to green spaces in cities and near homes—for instance, parks and community gardens—has been associated with physical and mental health benefits in numerous studies.¹ Among children, there is also evidence that higher exposure to green space is associated with improved cognitive and behavioral development.^{2,3,4} But it is largely unknown what induces people to actually use green spaces. The authors of a study in *Environmental Health Perspectives* probed that question in a group of teenagers.⁵

Lizan Bloemsma and colleagues at the National Institute for Public Health and the Environment in Bilthoven, the Netherlands, asked 1,911 Dutch 17-year-olds about their visits to green spaces. The teens were part of the Prevention and Incidence of Asthma and Mite Allergy birth cohort. They were asked how often and why they visited green spaces. Parents were asked whether their teens walked a family dog and how much time they spent doing so.

The teens were asked to classify their neighborhoods as “very green,” “green,” “moderately green,” “little green,” or “not green.” The actual greenness of their surroundings was categorized using the satellite-based Normalized Difference

Vegetation Index (NDVI), which is a proxy measure of the density of green vegetation within a given area. The researchers also assessed participants’ proximity to green surroundings using Top10NL, a detailed land-use map of the Netherlands. Unlike the NDVI, Top10NL provides insight into the potential accessibility of green space (e.g., forests vs. urban greenery vs. farmland).

About half of the 17-year-olds visited green spaces at least once a week in summer, but only about a quarter visited these areas in winter. Boys used green spaces more often for physical activity than girls, while dog owners visited green spaces 1.5–1.7 times more often than kids without dogs for the purpose of “experiencing nature and quietness.”

Overall, the perceived importance of a green environment was the strongest predictor of visits to green spaces. Teens who felt that green spaces were “very important” were 5–7 times more likely to visit them at least once a week for exercise and social activities, and almost 19 times more likely to visit for quietude and nature experiences, compared with those who felt green spaces were not important.



Perceiving green surroundings as valuable was by far the most important predictor of whether teens went to green spaces to experience nature and quietness. But having a dog to walk helped too. Image: © Sasa Prudkov/Shutterstock.

Lower-educated teens were more likely than teens with higher levels of education to report visiting green spaces for socializing and relaxation. “It is possible that higher-educated teenagers spend less time relaxing and engaging in social activities in general,” suggests Bloemsma.

On the other hand, having a highly educated father predicted the likelihood of teens visiting green spaces for physical and social activities, compared with having a less educated father. The authors note that the father’s level of education tends to be associated with family income and standard of living (potentially including better access to green spaces). The mother’s level of education was not a significant predictor in multivariable models.

“To our knowledge, this is the first study that has examined the perceived importance of a green environment as a predictor of green space visits in adolescents,” says Bloemsma. “Future studies are needed to explore the predictors of pro-environmental attitudes so that public health strategies to promote such attitudes could be implemented.”

Understanding patterns and predictors of green space use “are of prime importance for translating evidence into informed policy making and actions for this age group,” says Payam Dadvand, an environmental epidemiologist at ISGlobal in Barcelona, Spain. However, Dadvand, who was not involved in the study, cautions against generalizing Bloemsma’s results to other populations. “The associations evaluated in this study are quite context-

specific,” he explains, “and can be influenced by factors such as culture, climate, and other built environment characteristics.”

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